

## Wake County Natural Areas Inventory

### LAKE RALEIGH HARDWOOD FOREST

**Site Number:** 29

**Site Significance:** County

**Ownership:** N.C. State University

**Size:** about 85 acres

**Quadrangle:** Raleigh West

**SIGNIFICANT FEATURES:** This site contains an excellent example of a Mesic Mixed Hardwood Forest (Slope variant) natural community. The diversity of herbaceous species is perhaps higher here than anywhere else of comparable size in Wake County.

**LANDSCAPE RELATIONSHIPS:** This natural area lies in the Walnut Creek corridor, about 1.5 miles downstream (east) of Lake Johnson Nature Park.

**SITE DESCRIPTION:** The site lies in the southern part of Raleigh, immediately east of Trailwood Road (SR 1348) and north of Crump Road. The slopes on the southwestern side of Lake Raleigh contain an excellent example of mature Mesic Mixed Hardwood Forest (Slope variant); however, some portions are Dry-Mesic Oak-Hickory Forest. The canopy species include hickories (*Carya* spp.), white oak (*Quercus alba*), northern red oak (*Q. rubra*), tuliptree (*Liriodendron tulipifera*), and American beech (*Fagus grandifolia*).

The area possesses an extremely abundant and diverse shrub and herbaceous understory. In some ravines the herbaceous layer looks very similar to those found growing on basic parent material like amphibolite. The substrate here, however, is more acidic; felsic gneiss and schist underlie the forest. Uncommon herbs present on the slopes are puttyroot (*Aplectrum hyemale*), blue monkshood (*Aconitum uncinatum*), mountain phlox (*Phlox ovata*), southern wood violet (*Viola hirsutula*), and the Watch List showy scullcap (*Scutellaria serrata*). Dwarf crested iris (*Iris cristata*) is very common; common are Catesby's trillium (*Trillium catesbaei*), devil's-bit (*Chamaelirium luteum*), and wild geranium (*Geranium maculatum*). More than 10 species of ferns are present at this site.

Scarlet tanagers (*Piranga olivacea*) apparently nest in the forest, one of the few places close to the City of Raleigh where they occur. Prothonotary warblers (*Protonotaria citrea*) are present, as well, presumably nesting in the bottomland at the head of the lake.

**PROTECTION AND MANAGEMENT:** This tract is part of North Carolina State University's Centennial Campus. The university's development plans and Environmental Impact Statement (EIS) indicate there is an interest in conserving portions of this site; however, plans are not complete enough to assure protection. A residential area for the campus has been proposed for the upper slopes of the extreme western portion of the site, over objections from the NC NHP. A conference center is proposed for construction immediately to the east of the natural area, near the south side of the Lake Raleigh dam.